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(74) Agent: **BOOTH, Andrew, Steven**; The BOC Group Plc,
Chertsey Road, Windlesham, Surrey GU20 6HJ (GB).

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(71) Applicant (*for all designated States except US*): **THE BOC GROUP PLC** [GB/GB]; Chertsey Road, Windlesham, Surrey GU20 6HJ (GB).

(72) Inventors; and

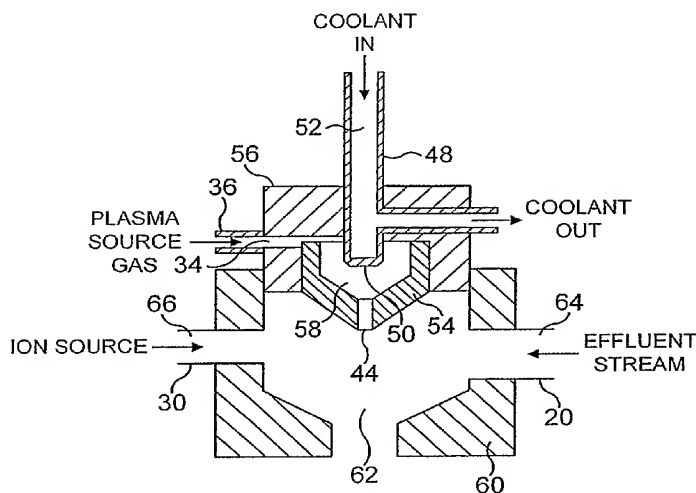
(75) Inventors/Applicants (*for US only*): **SMITH, James, Robert** [GB/GB]; c/o BOC Edwards, Kenn Business Park, Kenn Road, Clevedon, North Somerset BS21 6TH (GB). **SEELEY, Andrew, James** [GB/GB]; c/o BOC Edwards, Kenn Business Park, Kenn Road, Clevedon, North Somerset BS21 6TH (GB).

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(54) Title: METHOD AND APPARATUS FOR TREATING A FLUOROCOMPOUND-CONTAINING GAS STREAM



(57) Abstract: A method for treating a perfluorocompound-containing gas stream, for example an effluent fluid stream from a semiconductor manufacturing process tool. In one embodiment, a plasma torch is used to generate a plasma from an ionisable gas, such as nitrogen or argon. This plasma is injected into a reaction chamber, which receives both a stream of water vapour and an effluent fluid stream. The ionised stream dissociates the water vapour into heated H⁺ and OH⁻ ions for reaction with the perfluorocompound. An apparatus for treating a perfluorocompound containing gas stream comprises a means for generating a plasma from a source gas, a means for injecting the plasma into the reaction chamber, a means for conveying the gas stream to the reaction chamber, and a means for conveying a source of H⁺ and OH⁻ ions to the plasma.

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